

Monorail Review Panel

A Subcommittee of the Seattle Design Commission

ALIGNMENT AND STATION LOCATION ANALYSIS

January 2004

MONORAIL ALIGNMENT AND STATION LOCATION ANALYSIS

The following analysis provides a detailed review of the issues that are summarized in the Executive Summary. It is important to note that four of the 20 stations (85th, 65th, Dravus, and Mercer) have already been presented to the MRP for their first level of review, and therefore, the MRP is able to be more specific in its recommendations for those stations.

As a prologue to comments specific to the SMP staff recommended alignment and station locations, the Monorail Review Panel (MRP) offers these observations.

Review Schedule

The magnitude of the Monorail is such that it will substantially impact the aesthetics and form of our city, as well as the shape and function of the transportation network for the next 100 years or more. We have a responsibility to take the time that is needed to carefully consider options and impacts, and must not let an aggressive project schedule override the need for deliberate and thoughtful review.

The MRP continues to be concerned that the current project schedule is shortchanging our ability to review the project in a manner commensurate with the project's scale and complexity. Critical decisions are being made very quickly. This potentially places the MRP and the City in the awkward position of being asked to review (and the City to permit) the project before all critical information is known and impacts analyzed. We urge City staff to work with SMP to develop a more logical sequence of review that meets critical SMP schedule objectives without compromising the City's review responsibility.

Use of a Design Build Operate Maintain (DBOM) Process

SMP's plan to use a DBOM process raises several concerns for the MRP including how to control design quality after contractor selection; how to ensure that critical project elements such as landscaping and public art are kept in the budget and adequately funded; how aesthetics and urban design concerns will be incorporated into the design of guideway and other structural elements (switches, turnbacks, etc.) which are largely the contractor's responsibility; and the impact that the DBOM process appears to be having on the project schedule, and consequently the schedule for design review.

ALIGNMENT ISSUES

General Agreement with SMP Staff Recommended Alignment

Ideally, rail systems should be located in the following places: 1) in rail right-of-ways, 2) in major transportation corridors, 3) along major arterials and 4) only as a last resort along small residential streets and 5) as a final last resort through parks. In that most of the SMP recommended alignment follows major transportation corridors and major arterials, the MRP finds the route to be appropriate. Equally important, it is consistent with the City's Comprehensive Plan and relevant neighborhood plans; is sited to capture significant ridership from adjacent areas; and has the potential to become part of a greater network of transportation choices. Critical factors in achieving success will be the extent and quality of design, access and multimodal connections, and integration into each community. Where the first option is available and does not compromise service, it should be fully

explored before proceeding through the remaining options. It is clear that much work has yet to be done before we can say with confidence that this alignment will live up to its potential.

Guideway as a Civic and Sculptural Entity/Whole

This system will so dominate the streets along which it passes as to define them as “monorail streets” for the lifetime of the project. It is incumbent upon us all to ensure that being a “monorail street” is as positive a moniker as possible, but it will take considerable additional analysis and design to get there. There will be no hiding what is essentially a 14-mile long bridge; a monumental structure that can and should be an elegant and dynamic element in our city. It must be a design of its time that will age gracefully, eventually becoming integral to the fabric of Seattle.

Urban Design Implications of System Infrastructure

The Monorail includes significant infrastructure that raises serious design implications for the neighborhoods through which it passes. These elements include switches, turnbacks, power substations, equipment rooms, and storage tracks—all with the potential to affect pedestrian and vehicular circulation, safety and security, and the streetscape as a whole through their height, bulk, scale, mass, and shadow. To minimize these impacts, MRP believes the individual pieces of infrastructure must to be treated as urban design elements and accorded the budget to do so.

Single-Beam Guideway Configuration

The MRP is concerned that the single-beam guideway configuration raises more issues than it resolves, from the standpoint both of the visual impacts of additional switches and from the impact on future expansion of the system. A single guideway entails significantly more switches than the double guideway. The switches themselves have the potential to be extremely large “lids” over the street below—usually located apart from stations and therefore not necessarily a part of, nor benefiting from, the architecture and urban design treatment in those locations. Greater exploration of how switches can be successfully integrated into the urban fabric of the affected neighborhoods, and more information about how a single-beam configuration would accommodate the capacity load of another line merging into the Green Line, is required before the MRP can consider this configuration as a preferred option.

Integration into the City’s Transportation Network

The alignment must be designed with expansion at the core of its thinking if it is to succeed as an integral part of our city’s and region’s transportation system. The Monorail should become Seattle’s intermediate capacity transportation solution, that connects neighborhoods to each other and downtown, and that provides easy, reliable, efficient travel that is also supportive of neighborhood development. It should integrate seamlessly with our existing and planned transportation systems, including Light Rail, Commuter rail, bus transit, and trolleys. We have yet to see exactly where the connections to additional north and south lines will be, how they will look and operate, and what the potential impacts might be. This information is imperative to making a decision on the Green Line alignment.

STATION ISSUES

Planning Framework

Although the Monorail was not envisioned at the time neighborhood plans were written, the urban village strategy provides a good framework for approaching the site planning and location of

Monorail stations. While it appears that most of the proposed station locations pose little conflict with City policies and neighborhood plans, it is not yet clear whether the stations provide an opportunity to help implement the goals of each neighborhood plan through development that occurs as a part of, or a consequence of, Monorail construction.

We also agree with the concerns raised by the Planning Commission over siting Monorail stations in Interbay and Delridge, in that they potentially challenge City policy on industrial uses (in Interbay) and open space and drainage objectives (in Delridge). While City policy does not prevent the stations themselves from being sited in these locations, it does raise questions about how the surrounding areas will be impacted in the long term.

As the MRP progresses with design review, we will explore other issues related to station design and potential impacts on the surrounding neighborhood, including increased traffic volumes, increased traffic, and “hide and ride” parking. All of these factors are critical to understand and factor into both the actual location of each station as well as its size and design.

Access and Multimodal Connections

The most pressing station planning issues at this moment are those associated with how passengers will access the station and make connections to/from other modes of transportation. This includes drop-off/pickup zones, pedestrian and bicycle access and facilities (escalators/stairs/elevators, bike storage and parking), parking and waiting zones, bus stops, and the provision of a range of services related to passenger comfort that go beyond the absolute minimum necessary to convey passengers (such as public restrooms, adequate public seating and comfortable waiting spaces; and incorporation of private services such as coffee shops/newspaper stands). With respect to multimodal connections, the MRP believes the first and primary task should be an assessment of intermodal connections and the amount of space necessary at each station to develop and fully integrate stations with other modes of travel.

Station Size and Fit with Neighborhood

The MRP believes that the question of whether stations should be designed as prominent public spaces versus smaller infill development should be resolved on a case-by-case basis, and not as a matter of universal policy. Specifically, we are concerned that opportunities for future transit-oriented development not be limited by the way stations are sited. Most of these design and planning issues suggest a need for more space at stations rather than a minimum possible building footprint.

Station Configuration

It is too early for the MRP to offer recommendations on the various station configurations—iris, horizontal, etc.—having not been briefed in more than a cursory way on the options. This begs the question of whether exact station locations can be determined at this point, and is precisely why waiting until the FEIS is issued to render an opinion on the final alignment and station locations is prudent.

SEGMENT AND STATION-SPECIFIC ANALYSIS

Each segment includes a general statement of Panel conclusions and/or recommendations, followed by additional Panel comments regarding the alignment and stations within that segment.

Ballard Segment

The MRP agrees with the Preliminary Staff Recommendation regarding alignment and station locations, believing the proposed route (west side of 15th NW) to be both appropriate and logical, as are the general station locations in terms of key intersections and blocks.

Alignment

The challenge of this route is how to keep the Monorail from further dividing a neighborhood already struggling with staying connected across a wide and busy arterial, as well as meeting access needs of existing businesses and future development.

85th Street Station

1. **Small Site for Circulation Needs:** Concern that the site size is too small and will limit the ability to accommodate the necessary bus and vehicular drop-off and pick-up connections, especially as a terminus station.
2. **Midblock Location Concerns:** This corner location is critical to the commercial center of this neighborhood; therefore, the development of a mid-block station should not preclude viable future development of the leftover corner parcel, whether it is open space or development. Likewise, if the station is located at the corner, the design should take full advantage of the gateway notion and strive to be a neighborhood landmark and focal point.
3. **Minimize Guideway Disruption:** The MRP strongly recommends that the switch, storage and tail-track components be incorporated into the station and not stretched out along the guideway, further distributing the disruption associated with these operational elements. The size of these system structures is significant and likely to create visual obstructions at this critical gateway location.
4. **Adaptability of Station:** At some future point, this may not be a terminus station; therefore the design of the station should not preclude further expansion of the alignment to the north.

65th Street Station

1. **Station Design:** This prominent, visible and heavily trafficked corner location must be complemented by a grand station design.
2. **Future Development Potential:** Similar to the 85th Street Station, SMP should configure the site so that both the abutting and leftover parcels created through the development of the station may reasonably accommodate future development.
3. **Circulation Areas:** The site must accommodate the necessary bus and vehicular drop-off and pick-up connections.

Market Station

1. **SW Corner Site Selection:** Given the option to redevelop the Walgreen's or the Denny's site, MRP prefers that the Denny's remain intact because of its local landmark status within the community and that removal of the suburban-style, auto-oriented Walgreen's structure is preferred. Considering that most riders are expected to arrive from the northwest, however, the Denny's site is preferable and makes sense from that standpoint.

Ship Canal Bridge

1. **Bridge Design:** The design of the Ship Canal crossing is the single greatest design opportunity for the Monorail project and should be a signature piece for the Monorail, for Ballard, and the city as a whole—something that our great-grandchildren will look at in awe. It should be conceived of as a landmark structure with a bold and innovative design. At this point, it does not

appear that the bridge is being given the same level of design attention as the stations. The renderings to this point make the bridge look like a freeway overpass, which is unfortunate imagery for a mass transit system that should draw people away from the automobile. The MRP awaits the opportunity to have the design and its rationale presented to the MRP.

Interbay Segment

The MRP generally agrees with the Preliminary Staff Recommended alignment, however, we do not support the locations of numerous switches within the right-of-way (near the Operations Center) having excessive negative impacts (shadow, bulk, views) on the streetscape. The MRP generally does not agree with the station location at Dravus because it is poorly sited with respect to access and impacts to existing businesses. Thus far, the MRP agrees with the Mercer station location, but notes it has not been sited and designed with adequate connections to its primary ridership area of lower Queen Anne.

Alignment

1. **Alignment & Alternative:** There is concern that the guideway will generate significant morning shadows to the Interbay P-Patch. Also, this alignment will need to replace or “trim” 130-150 street trees through this small segment of the alignment which would be an unfortunate loss to this arterial. A new alignment alternative might be to run alongside the railroad right-of-way rather than down the city streets.
2. **Turning Eastward:** Harrison Street appears too narrow to accommodate the guideway gracefully, while West Mercer Street seems to be a more logical right-of-way to follow and would allow for a station that could better serve the Queen Anne community than the station at Elliott and Mercer.

Dravus Station

1. **Business Displacement:** The MRP supports this location only if the major generator of activity for this neighborhood, QFC, is able to remain. It appears that the proposed station would reduce the QFC parking to a degree that would threaten QFC’s commercial viability and force displacement. Further information concerning the feasibility of the south station alternative is necessary.
2. **Difficult Intermodal Connections:** Pick-up and drop-off points at this location would be difficult because turning into and out of 16th onto Dravus is problematic and the intersection is too close to 15th to be signalized.
3. **Alternate Station Location:** A station to the south of Dravus, where the single family houses are located, appears to be a better location because 1) there is more space for development; 2) it would not impact the major business in the area and 3) would allow for parking and drop off to be more adequately addressed than the tight QFC site.
4. **Planning Framework:** Given that BINMIC focuses on preserving industrial lands, the siting and analysis of impacts generated by this station is critical for the Dravus station, as well as the potential future station at Howe/Blaine.

Operations Center

1. **Urban Design:** The impact and presence of six switches over the street on 15th -- potentially 450 feet in length -- has profound urban design impacts (shadow, bulk, height and aesthetics) and requires an extensive amount of further study and discussion. If the switches cannot be provided out of the right-of-way, then this is the wrong location for the Operations Center.

Howe Station (Optional future station)

1. **Inherent Land Use Conflict:** This station has been deferred as an optional future station and therefore has not been discussed specifically. A station located at the bridge offers much more connectivity to Magnolia, however, than the Dravus station. Additionally, a station at the bridge could spur, encourage, and sponsor development. Nonetheless, this station location raises significant zoning and land use issues regarding the availability of industrially zoned and developed land in the City.
2. **Future Station Potential:** Current decisions, such as the location of the switches, should not limit the ability to construct a station at this location in the future.

Mercer Station

1. **Connectivity:** As presented, the station design fails to address the crucial issues of ridership, intermodal connectivity and pedestrian access to Elliott Avenue and west Queen Anne. In order to serve Queen Anne and Uptown residents, substantial access improvements and pedestrian connections to Queen Anne must be made.

Queen Anne/Seattle Center/Belltown Segment

The MRP generally agrees with the Key Arena and Broad Street station locations, but did not reach consensus on a preferred alignment at the Seattle Center. The Panel was split regarding the Preliminary Staff Recommendation with five supporting a through the Center alignment, five supporting a Mercer Street alignment, one recommending a Thomas Street alignment and one undecided. Given the significant community interest on this issue, the MRP has articulated three different perspectives.

The MRP is acutely aware that the alignment at the Seattle Center is probably the most contentious issue for the entire Green Line. At best, it is an opportunity to elevate and enliven public debate in an open sharing of opinions. At worst, it is a divisive, politically charged quagmire, compromising our community. The Monorail Review Panel is truly a cross-sectional representation of its constituency and is constructively divided on the issue. Like any other group of citizens with divergent life experiences, perceptions and opinions, the MRP exhibits diverse opinions. One group of members sees the Monorail running through the Center as an amenity, providing a unique experience and perspective from which to view this important public venue, while further enlivening and animating the Center. Another group of members sees the Monorail running through the Center as an intrusion or violation of the Center, bifurcating one of our most precious urban resources and distracting from the experiences therein. Another opinion suggests that the Thomas Street alignment is still worth considering for its ability to provide a short, clear connection between desired destinations with a minimum of impact. Whichever alignment is chosen, it must be done exceedingly well.

Alignment

Position One (DEIS Alternative 3.2): In Favor of an Around the Center Alignment (Mercer Alignment) – 5 Votes

- **Public Open Space:** Seattle Center is a vitally important public open space which serves many functions and activities, and must be preserved and stewarded from intrusion. Open space throughout the growing City must to be preserved inviolate for future enjoyment and use. The Center accommodates a large range of uses from active to passive recreation and the quality of

the green environment is important to many, if not all, of these activities. The Monorail will dramatically reduce trees surrounding the Fountain and Stadium thus impacting these uses. A viable alternative Mercer route exists that does not encroach on these uses and does not substantially damage the Center's green environment. A Monorail running through the festivals and sports events in Memorial Stadium every few minutes will be a conflicting visual and audible encroachment and distraction. The visual implications of viewing the guideway from below are tremendous. The Monorail is a large transportation system, not a recreational activity, and dismissing its noise as such does not recognize all the forms of recreation that occur at Seattle Center.

- **Challenge Assumptions:** Winding the alignment through Seattle Center is partly generated by arriving at the Center from Harrison and then leaving through the EMP—neither of which must be accepted as givens and should be questioned further.
- **Existing Transportation Corridors:** Mercer and 5th Avenue are both working transportation corridors of a scale that can handle the Monorail. The multiple lanes of traffic on Mercer function as a larger barrier between the neighborhood and Center than the Monorail ever could be.
- **International Fountain:** The International Fountain, and the green space surrounding it, has serves as a place of contemplation. The Center Master Plan states "The International Fountain and the space around it should be preserved as the "heart" of Seattle Center." The intrusion of a rapid transit system is an incompatible and inappropriate use in the International Fountain area.
- **Mercer Route:** The Mercer Route allows for a station on 5th Avenue, north of Broad Street and directly across 5th Avenue from Memorial Stadium that will better serve the Center than a station south of Broad. By using the route from Elliott up Mercer (instead of Harrison), the station at the Northwest rooms could be shifted up to Mercer Street and tie into the soon-to-be-redeveloped entry to the Center on 2nd. A Monorail route along Mercer Street better supports the theaters as riders can view the marquees, read what is playing, and purchase tickets. The Mercer Route is the route approved by Seattle's voters.
- **Future Development:** Going through the Center divides the grounds in two and prevents opportunity for future development at the stadium site. This area is a sizeable open space for future redevelopment opportunity. The stadium site has been subject to numerous redevelopment concepts over the years, and may not be a stadium 20 years from now.
- **Seattle Center Master Plan:** Running the Monorail through the Fountain Lawn is inconsistent with the Seattle Center Master Plan (SCMP). The SCMP, and subsequent amendments, established a vision for the Seattle Center that places a premium on creating a premier gathering place for the citizens of Seattle, characterized by indoor and outdoor performance spaces that are pedestrian in nature, and where parking and vehicular circulation are kept on the periphery of the campus. The Plan states: "Pedestrian drop-off points should be located strategically around the perimeter of the site. Vehicular access should not segment the site or undermine the pedestrian nature of the site." The SCMP states: "The physical design of the site should create an environment that enhances a sense of personal safety and sensitivity to human scale design elements." Monorail columns through the Center will be 60 feet tall and 5 to 6 feet in diameter at-grade. Monorail structure is not a "human scale design element" and this additionally conflicts with the SCMP.

Position Two (DEIS Alternative 3.1): In Favor of a Through the Center Alignment (NW Rooms Alignment) – 5 Votes

- **Public Open Space:** Seattle Center is an important public space which serves many functions and activities, the Monorail being one of them. The outdoor, public uses of Seattle Center have never been typified as those of quiet contemplation, but rather are those of celebration and festive

gathering. The International Fountain and the green space around it is an all-embracing urban amenity that can serve activities ranging from the raucous steel bands of Bumbershoot to the contemplative gatherings which celebrate historic events.

- **Open Views:** Removal of the NW Rooms offers the opportunity to open up views and access into Seattle Center and forge a stronger urban design connection with the Uptown Queen Anne business area.
- **Monorail Heritage:** The Monorail has always been a part of the heritage and history of the Seattle Center. Like the Space Needle or the Fountain, the Monorail is an indelible part of the past, and it should continue to be an integral and vital part of the Center's future by going *through* and not around the center.
- **Community Preference:** The Seattle Center itself, and many residents of lower Queen Anne have stated a preference for this alignment, with the idea that the through the Center alignment of the Monorail provides a dynamic element that will bring vitality and energy into and through the Center.
- **Architectural Opportunities:** The architecture of the Monorail can easily be accommodated within Seattle Center and is consistent with existing architecture as exemplified by the EMP, the mass and exuberance of the Space Needle and other World's Fair-era buildings.
- **Future Development:** A through the Center alignment stays clear of Memorial Stadium and thus would not inhibit future redevelopment of that site.
- **Visual Experience:** A through the center alignment will provide another way for Seattleites and visitors to experience the beauty of the Seattle Center, from above and it will introduce a dynamic structure into the Center will complement Seattle Center's urban design and architecture. From a distance, this alignment echoes the curve of the International Fountain and continues the beloved passage through the Experience Music Project.
- **Mercer Mess:** A through the center alignment reduces travel times, shortens the route, and does not further exacerbate the city's worst traffic / most congested arterial. This route allows for a more gradual curve of the guideway - a more sculptural and eye pleasing structure.

Position Three (DEIS Alternative 3.3): In Favor of a Thomas Street Alignment (Thomas Alignment) – 1 Vote

- **Efficiency:** This is the most direct and time-efficient route. Adding curves and distance to the route should be avoided wherever possible, unless the reasons for adding them are absolutely compelling. The Mercer route adds too much time and distance to the route.
- **Keep Center Intact:** With a Thomas alignment, the Center grounds remain intact and contiguous. The Thomas right-of-way already exists through the grounds, thus the rails would follow this alignment, paralleling the building faces rather than running diagonally through the grounds and running down Thomas, which functions primarily as a service access. The visual impact on the Children's Theater could be embraced through an innovative design.
- **Minimal Impacts:** The only major drawbacks, when compared to the NW Route, are the impact on the Children's Theater and increasing the station distance to the uptown business district by a block. The NW Route passes over the stadium stage, Fountain open space, small performance spaces between the walkway and the theaters, and the stage by the NW rooms. The Thomas alignment does pass somewhat close to the Mural Amphitheater but trees mask it visually.

Fifth Avenue Segment

The MRP generally agrees with the Preliminary Staff Recommended Fifth Avenue alignment and the Bell Street Station location. The MRP does not agree with the proposed Stewart Street

station location, believing that it should be located as close to the 5th and Stewart corner as possible to facilitate connections to both Light Rail and Downtown's retail core.

Alignment

1. **Alignment Alternatives:** While generally agreeing with a west side alignment, MRP nonetheless raises concerns regarding the turn at Stewart, the potential sky bridge and connections to the Westlake hub. The east side alignment would cast less shadow than the west side, but a wider sidewalk along the west side would help to activate the public space and be beneficial to the businesses. The east side is preferred only if a tighter turn would be feasible. The center alignment is a poor idea.
2. **Preserve Street Trees:** The street trees should be preserved along 5th Avenue, although saving them may be unrealistic given that the light blockage will adversely affect their growth patterns, potentially rendering them unsightly rather than a positive contribution.
3. **Guideway Distances:** Further exploration of shifting the guideway further than five feet from the adjacent building faces is imperative. These alignment alternatives illustrate the importance of finding the appropriate balance between impacting the streetscape and impacting the residents of adjacent buildings.
4. **Iris Configuration:** The use of the iris configuration could be very beneficial in navigating around the curve/difficult bend at Stewart Street, where the transition from 5th Avenue to Second seems to be a very awkward zigzag with turns that barely miss a number of historic structures and eliminates a large sequoia tree.
5. **Urban Space:** The confluence of streets from 3rd Avenue looking east as Olive and Stewart split around the Times Square building is one of the most dramatic and dynamic in the city which will be destroyed by the proposed Monorail alignment.
6. **Future Decisions:** Additional questions include how the turns will be made at 5th Avenue and 2nd Avenue, whether the structure will straddle the street and how the alignments along 5th Avenue and 2nd Avenue affect each other. The MRP is open to further discussion on the alternatives pending review of such information.

Fifth and Bell Station

1. **Business Displacement:** The primary challenge here is how to avoid displacing businesses, therefore the possibility of locating the station across the street in the parking lot should be exhausted before the west side location is finalized.
2. **Viability of 5th Avenue:** Fifth Avenue is becoming an increasingly important east-west corridor as mixed uses are being constructed and attention to the pedestrian experience and amenities is critical.

Fifth and Stewart Station

1. **Intermodal Connectivity:** The opportunity to connect to the existing bus/light rail tunnel warrants a more in-depth exploration of how to create a true multimodal hub and sense of place connected to the retail core at Westlake. There is enormous potential for this area to transform into a great urban space. It is imperative that the design of this station seizes the opportunity to function and present itself as the central downtown transit hub.
2. **Westlake Sky Bridge:** The implied sky bridge to Westlake is unacceptable. First, pedestrians belong on the street. Second, traversing all levels of Westlake Mall to access to the bus/light rail tunnel is inefficient. Third, justifying the use of public money to funnel passengers through a private building is unreasonable.

Second Avenue Segment

The MRP agrees with the Preliminary Staff Recommended alignment and station locations, while acknowledging significant impacts to one of downtown's most important streets. The MRP is especially pleased to see the station location at Second and Yesler allowing for redevelopment of this important site.

Alignment

1. **Alignment Alternatives:** The west side alignment is the best choice for several reasons, but most notably that there are three existing open spaces (the Garden of Remembrance, WaMu courtyard and Wells Fargo plaza) on the east side of the street which are important to our downtown and should be protected. A west of center alignment (as is proposed for Fifth Avenue) is the ideal alignment preference along Second Avenue due to the precarious distance of the guideway to the adjacent buildings, and should be studied by SMP.
2. **Equitable Distribution of Impacts:** Paying particular attention to specific buildings along the route, especially when they are not yet built, is unreasonable and unfair. Everyone will be impacted by this system; no one property or owner is more burdened than another.
3. **Guideway Distance:** The proximity of the guideway to building windows is a concern for safety and visual impact on buildings.
4. **Guideway Form:** The geometry of the beams must be carefully formed to create an elegant complement to the geometry of the street.
5. **Bike Lane:** Preservation of the bike lane is appreciated.
6. **Other Transit Agencies:** Obtaining more feedback from the affected transit agencies in the region on how this alignment will impact their routes and services is advised before a recommendation on the Transitway Agreement is made.
7. **Configuration:** The idea of maintaining an iris configuration along 2nd avenue is intriguing, but requires further visual information.
8. **View Blockage:** More information on the view blockage impacts down the streets towards Elliott Bay and along 2nd Ave, as well as the view looking south down 2nd Avenue is critical to fully understanding this portion of the alignment and making decisions on needed design elements.

Second and Pike Station

1. **Pedestrian Connections:** This station must communicate clear pedestrian connections to the Market a through-block connection or other means.
2. **Guideway Configuration:** The horizontal dual beam configuration is preferred due to its lower profile.

Second and Madison Station

1. **Federal Involvement:** Determining the feasibility of acquiring a historically significant federal property on their timeline, and the impact on the system of delaying this key station, will be essential.
2. **Ferry Connections:** Connections to the ferries and other sources of ridership should be addressed in the siting and design of the station.

Pioneer Square/SODO Segment

The MRP agrees with the Preliminary Staff Recommended station location for the King/Weller station, finding it to be an excellent location for a multimodal hub. The MRP agrees with the Stadium station location, but has concerns regarding its necessity. The MRP does not agree

with the Lander Street station location due to concerns about accessibility and impacts to the existing streetscape and displacement of existing businesses.

Alignment

1. **Intermodal Connectivity:** The proposed alignment shifts the Monorail station further from the Light Rail station which is contrary to the intent of improving and integrating transit systems.
2. **Freight Mobility:** The impacts to freight mobility through SODO need be further studied. For instance, column placement will be critical in terms of freight mobility.
3. **Route:** The diagonal route seems incongruous as it runs through mostly private land: running parallel to an existing rail right-of-way seem an appropriate place to locate a new rail system.
4. **Relocate Operations Center:** If the alignment follows the diagonal from 3rd Avenue to 1st Avenue and Lander Street, the Operations Center (now shown in Interbay) should be located in this area. The huge “switch-bank” could then be located entirely off the public right-of-way in an industrial neighborhood.
5. **King Street Station:** The alignment relationship to King Street Station needs to be studied further. The route threads through a tight space close to a once (and hopefully future) grand civic building. Finding another way to reach the King/ Weller station would be preferred.

Second and Yesler Station

1. **Redevelopment in Historic District:** The station location is well-located and the perfect opportunity to redevelop the sinking ship garage site in a manner that fits in with the historic district and does not damage our historic resources. That said, Yesler Station must be approached as a development site and not a station with leftover park for new open space. The neighborhood does not need another plaza, but a vibrant, viable building.
2. **Views:** The view impacts down Yesler need to be preserved to the greatest extent possible.
3. **Multimodal Constraints:** This station faces multimodal constraints such as the limited space, existing traffic patterns and quantities which occur on all three sides of the site. The program must understand these limitations while also embracing the opportunities of the central location and proximity to a major pedestrian destination. Furthermore, this site should consider replacing the existing parking under the redeveloped site.

King/Weller Station

1. **Views:** This alignment bisects Pioneer Square Historic District and the 2nd Avenue extension that was originally intended to open up views to the station.
2. **Small Site:** This is a very constrained space between King Street Center and King Street station and the KC pocket park. The station design must fit in with the Weller Street Bridge.

Stadium Station

1. **Displacement:** Cutting across private land instead of using the right-of-way may be expedient but the impacts need to be considered, especially on future land uses. Much additional information and discussion is needed to better understand the turnback/switch location track at this station.
2. **Single-Purpose Station:** Stadium seems to be a single-purpose station that could be delayed as the King Weller Stations may provide the necessary service. It is unclear why a single station at King/ Weller cannot service both stadiums. Alternatively, the station could be moved further south (closer to Massachusetts) and possibly serve existing and future development in that area.

Lander Street Station

1. **Location:** A station located mid-block does not provide the visibility and connections offered by a corner property. For example, the corner of First Avenue and Lander appears to be a better location (Starbucks parking lot) since the guideway already crosses over this corner of the parking lot, thereby impacting its current use and potential redevelopment for other uses.
2. **Connectivity:** The opportunity for intermodal connections, especially pedestrian accommodations, at this station need to be considered more than they apparently have been.

West Seattle Segment

The MRP agrees with the staff recommended station locations at the two junctions – Alaska and Morgan, while acknowledging that the alignment down California is not desirable. The MRP does not agree with the Preliminary Staff Recommended station locations for Avalon and Delridge nor the alignment connecting the two stations and continuing to the Alaska station.

Alignment

1. **Key Intersection:** Preserving the Alaska/California intersection as one of the few east-west connections in West Seattle is important. Routing the Monorail along Alaska compromises this connection.
2. **DEIS Options:** More information on Options 6.1.3 and 6.1.4 described in the DEIS (p. 3-38-3-39) is needed as those two alignments are preferred by MRP. MRP's initial reaction was that eliminating the two 90 degree turns bends at Avalon/35th and 35th/Alaska was more logical and that shifting the station from the green space at 35th was preferred.
3. **Diagonal Alignment:** The diagonal alignment along the main road is clearly preferable on ALL accounts and we support this alignment in the most forceful terms and reject the convoluted alignment down SW Alaska from 35th to 39th as the wrong street for the Monorail.
4. **Fauntleroy:** It appears that moving back the property line along Fauntleroy approximately 8' might allow enough room for the Monorail without eliminating a lane of traffic and still leave the car lots for viable future urban development. The diagonal route along Fauntleroy Way is more direct, has fewer bends and is closer to population centers making it a far better alignment than that proposed.
5. **California Avenue:** California is a narrow corridor (80' wide) which will be greatly impacted by the shadows, bulk, height and aesthetics of the guideway and especially the switches. MRP does not yet give support to the proposed alignment along California but requests to see other alternatives.

West Seattle Bridge

1. **Two Positions:** The MRP is of two minds with respect to the bridge. On the one hand, believing the proposed alignment allows for the quality of the guideway design to be consistent with the visual prominence of the bridge. On the other hand believing an alignment that does not require a structure on top of the bridge should be considered since the height of the bridge is already enormous and the approach necessary at both ends for the Monorail would make for a very long obtrusive structure.

Delridge Station

1. **Problematic Site:** None of the proposed alternatives satisfy the desire to function as a development catalyst and/or a transit hub. Furthermore, the proposed site is located too close to

Longfellow Creek and is not particularly well-located for visibility or pedestrian access. Other more appropriate locations might be the fire station property, Port properties or at the bridge.

2. **Park & Ride:** A study of the station including a park-and-ride lot at this location is recommended. The shared parking opportunities at this location appear to be very viable. A parking structure or lot could also be explored closer to the Bridge.
3. **Residential Development:** Many new condos and apartments are being developed along Avalon (2-3 long city blocks from this location) and significant pedestrian flow downhill to this station should be factored into the station location.
4. **Transfer Station:** This station should be designed and located as a transfer station. Developing this station as a transit hub makes sense, but would need to better tie into the bus system.

Avalon Station

1. **Ridership:** This is another station with a catchment area including a significant amount of open space, raising questions about the purpose of the station. Other issues exist related to poor pedestrian connections, difficult street crossings, and loss of open space. Both Avalon and Delridge stations have issues to resolve before we feel comfortable that they will be usable and contribute meaningfully to the system overall, and to transportation in/for West Seattle, specifically.
2. **Alternative Station Location:** The Avalon 1 Station described in the DEIS is the better location for this station. The “preferred” location will eliminate park property that is part of the larger green space of the stadium and golf course. Most riders will end up on the opposite side of 35th and a good distance away from the Avalon intersection and bus transfers. The Avalon 1 Station, by contrast, facilitates a more seamless connection to bus transfers both in location and in proximity to buses and preserves the open space at the corner.
3. **Transfer Station:** This station should be designed and located to be a transfer station.

Alaska Station

1. **Good Station Location:** The MRP supports the general location of this station at the Junction: given that the underlying zoning is 85 feet and, that it is currently very undeveloped makes this an ideal place to insert transit. It will be critical to make connections to the bus hub.
2. **Connectivity:** Station design should maximize potential for connectivity to future developments in the area and explore potential shared parking/pedestrian amenities to these high-density zoned structures to ensure the strengthening of the commercial nature of the neighborhood.

Morgan Station

1. **Commercial Corridor:** The historical remnants of older streetcar suggest this was, and still is, an appropriate location for transit and the commercial activity generated by transit.
2. **Mid-block Location Concerns:** This corner location is critical to the commercial center of this neighborhood; therefore, the development of a mid-block station should not preclude viable future development of the leftover corner parcel, whether it is open space or development. Likewise, if the station is located at the corner, the design should take full advantage of the gateway notion and strive to be a neighborhood landmark and focal point.